

For information on national teacher certification, contact:

☛ National Board for Professional Teaching Standards, 26555 Evergreen Rd., Suite 400, Southfield, MI 48076. Internet: <http://www.nbpts.org>

For information on alternative certification programs, contact:

☛ ERIC Clearinghouse on Teacher Education, 1307 New York Ave. NW, Washington, DC 20005-4701.

Special Education Teachers

(O*NET 31311A, 31311B, and 31311C)

Significant Points

- A bachelor's degree, completion of an approved teacher preparation program, and a license are required to qualify; many States require a master's degree.
- Many States offer alternative licensure programs to attract people into these jobs.
- Job openings arising from rapid employment growth and some job turnover mean excellent job prospects; many school districts report shortages of qualified teachers.

Nature of the Work

Special education teachers work with children and youths who have a variety of disabilities. Most special education teachers instruct students at the elementary, middle, and secondary school level, although some teachers work with infants and toddlers. Special education teachers design and modify instruction to meet a student's special needs. Teachers also work with students who have other special instructional needs, including the gifted and talented.

The various types of disabilities delineated in Federal legislation concerning special education programs include specific learning disabilities, speech or language impairments, mental retardation, emotional disturbance, multiple disabilities, hearing impairments, orthopedic impairments, other health impairments, visual impairments, autism, deaf-blindness, and traumatic brain injury. Students are classified under one of the categories, and special education teachers are prepared to work with specific groups.

Special education teachers use various techniques to promote learning. Depending on the disability, teaching methods can include individualized instruction, problem-solving assignments, and group or individual work. Special education teachers are legally required to help develop an Individualized Education Program (IEP) for each special education student. The IEP sets personalized goals for each student and is tailored to a student's individual learning style and ability. This program includes a transition plan outlining specific steps to prepare special education students for middle school or high school, or in the case of older students, a job or postsecondary study. Teachers review the IEP with the student's parents, school administrators, and often the student's general education teacher. Teachers work closely with parents to inform them of their child's progress and suggest techniques to promote learning at home.

Teachers design curricula, assign work geared toward each student's ability, and grade papers and homework assignments. Special education teachers are involved in a student's behavioral as well as academic development. They help special education students develop emotionally, be comfortable in social situations, and be aware of socially acceptable behavior. Preparing special education students for daily life after graduation is an important aspect of the job. Teachers help students learn routine skills, such as balancing a checkbook, or provide them with career counseling.

As schools become more inclusive, special education teachers and general education teachers increasingly work together in



Special education teachers design and modify instruction to meet students' special needs.

general education classrooms. Special education teachers help general educators adapt curriculum materials and teaching techniques to meet the needs of disabled students. They coordinate the work of teachers, teacher assistants, and themselves to meet the requirements of inclusive special education programs, in addition to teaching special education students. A large part of a special education teacher's job involves interacting with others. They communicate frequently with parents, social workers, school psychologists, occupational and physical therapists, school administrators, and other teachers.

Special education teachers work in a variety of settings. Some have their own classrooms and teach only special education students; others work as special education resource teachers and offer individualized help to students in general education classrooms; and others teach with general education teachers in classes composed of both general and special education students. Some teachers work in a resource room, where special education students work several hours a day, separate from their general education classroom. A significantly smaller proportion of special education teachers works in residential facilities or tutor students in homebound or hospital environments.

Early identification of a child with special needs is another important part of a special education teacher's job. Early intervention is essential in educating these children. Special education teachers who work with infants usually travel to the child's home to work with the child and his or her parents.

Technology is playing an increasingly important role in special education. Special education teachers use specialized equipment such as computers with synthesized speech, interactive educational software programs, and audiotapes.

Working Conditions

Special education teachers enjoy the challenge of working with these students and the opportunity to establish meaningful relationships. Although helping students with disabilities can be highly rewarding, the work can also be emotionally and physically draining. Special education teachers are under considerable stress due to heavy workloads and tedious administrative tasks. They must produce a substantial amount of paperwork documenting each student's progress. Exacerbating this stress is the threat of litigation by students' parents if correct procedures are not followed, or if the parent feels their child is not receiving an adequate education. The physical and emotional demands of the job cause some special education teachers to leave the occupation.

Many schools offer year-round education for special education students, but most special education teachers work the traditional 10-month school year.

Employment

Special education teachers held about 406,000 jobs in 1998. The majority of special education teachers were employed in elementary, middle, and secondary public schools. The rest worked in separate educational facilities—public or private—residential facilities, or in homebound or hospital environments.

Training, Other Qualifications, and Advancement

All 50 States and the District of Columbia require special education teachers to be licensed. Special education licensure varies by State. In many States, special education teachers receive a general education credential to teach kindergarten through grade 12. These teachers train in a specialty, such as learning disabilities or behavioral disorders. Some States offer general special education licenses, others license several different specialties within special education, while others require teachers to first obtain a general education license and then an additional license in special education. State boards of education or a licensure advisory committee usually grant licenses.

All States require a bachelor's degree and completion of an approved teacher preparation program with a prescribed number of subject and education credits and supervised practice teaching. Many States require special education teachers to obtain a master's degree in special education, involving at least one year of additional coursework, including a specialization, beyond the bachelor's degree.

Some States have reciprocity agreements allowing special education teachers to transfer their license from one State to another, but many still require special education teachers to pass licensing requirements for that State. In the future, employers may recognize certification or standards offered by national organization.

Many colleges and universities across the United States offer programs in special education, including undergraduate, master's, and doctoral programs. Special education teachers usually undergo longer periods of training than general education teachers. Most bachelor's degree programs are 4-year programs including general and specialized courses in special education. However, an increasing number of institutions require a fifth year or other postbaccalaureate preparation. Courses include educational psychology, legal issues of special education, child growth and development, and knowledge and skills needed for teaching students with disabilities. Some programs require specialization. Others offer generalized special education degrees, or study in several specialized areas. The last year of the program is usually spent student teaching in a classroom supervised by a certified teacher.

Alternative and emergency licenses are available in many States, due to the need to fill special education teaching positions. Alternative licenses are designed to bring college graduates and those changing careers into teaching more quickly. Requirements for an alternative license may be less stringent than for a regular license and vary by State. In some programs, individuals begin teaching quickly under a provisional license. They can obtain a regular license by teaching under the supervision of licensed teachers for a period of 1 to 2 years while taking education courses. Emergency licenses are granted when States have difficulty finding licensed special education teachers to fill positions.

Special education teachers must be patient, able to motivate students, understanding of their students' special needs, and accepting of differences in others. Teachers must be creative and apply different types of teaching methods to reach students who are having difficulty. Communication and cooperation are essential traits because special education teachers spend a great deal of time interacting with others, including students, parents, and school faculty and administrators.

Special education teachers can advance to become supervisors or administrators. They may also earn advanced degrees and become instructors in colleges that prepare others for special education teaching. In some school systems, highly experienced teachers can become mentor teachers to less experienced

ones; they provide guidance to these teachers while maintaining a light teaching load.

Job Outlook

Employment of special education teachers is expected to increase faster than the average for all occupations through 2008, spurred by continued growth in the number of special education students needing services, legislation emphasizing training and employment for individuals with disabilities, and educational reform. Turnover will lead to additional job openings as special education teachers switch to general education or change careers altogether. Rapid employment growth and job turnover should result in a very favorable job market.

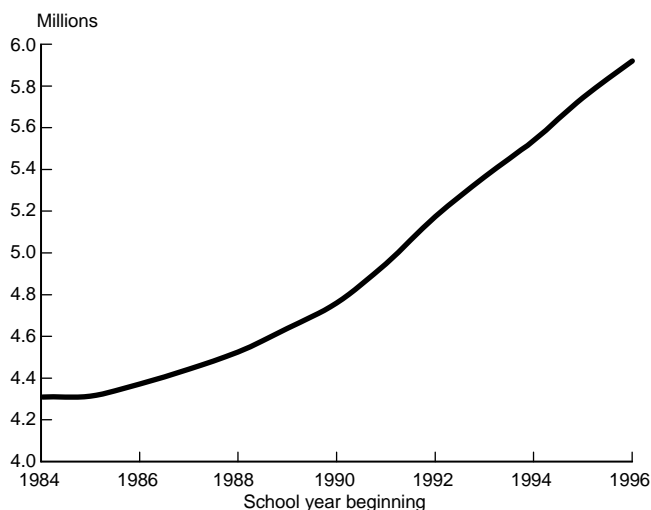
Special education teachers have excellent job prospects, as many school districts report shortages of qualified teachers. Job outlook varies by geographic area and specialty. Positions in rural areas and inner cities are more plentiful than job openings in suburban or wealthy urban areas. In addition, job opportunities may be better in certain specialties—such as speech or language impairments, and learning disabilities—because of large enrollment increases of special education students classified under these disability categories. Legislation encouraging early intervention and special education for infants, toddlers, and preschoolers has created a need for early childhood special education teachers. Special education teachers who are bilingual or have multicultural experience are also needed to work with an increasingly diverse student population.

The number of students requiring special education services has been steadily increasing, as indicated by the accompanying chart. This trend is expected to continue because of legislation which expanded the age range of children receiving special education services to include those from birth to age 21; medical advances resulting in more survivors of accidents and illness; the postponement of childbirth by more women, resulting in a greater number of premature births and children born with birth defects; and growth in the general population.

Earnings

Median annual earnings of special education teachers in 1998 were \$37,850. The middle 50 percent earned between \$30,410 and \$48,390. The lowest 10 percent earned less than \$25,450; the highest 10 percent, more than \$78,030.

The number of special education students, age 21 or younger served by federally supported programs, grew by 1.6 million between 1984 and 1996.



Source: National Center for Education Statistics

In 1998, about 58 percent of special education teachers belonged to unions—mainly the American Federation of Teachers and the National Education Association—that bargain with school systems over wages, hours, and the terms and conditions of employment.

In some schools, teachers receive extra pay for coaching sports and working with students in extracurricular activities. Some teachers earn extra income during the summer, working in the school system or in other jobs.

Related Occupations

Special education teachers work with students who have disabilities and special needs. Other occupations involved with the identification, evaluation, and development of students with disabilities include school psychologists, social workers, speech pathologists, rehabilitation counselors, adapted physical education teachers, special

education technology specialists, and occupational, physical, creative arts, and recreational therapists.

Sources of Additional Information

For information on professions related to early intervention and education for children with disabilities, a list of accredited schools, teacher certification, financial aid information, and general information on related personnel issues—including recruitment, retention, and supply of and demand for special education professionals—contact:

☛ National Clearinghouse for Professions in Special Education, Council for Exceptional Children, 1920 Association Dr., Reston, VA 20191-1589. Internet: <http://www.special-ed-careers.org>

To learn more about the special education teacher certification and licensing requirements in your State, contact your State's department of education.

Health Diagnosticians

Chiropractors

(O*NET 32113)

Significant Points

- Employment of chiropractors is expected to increase rapidly and job prospects should be good.
- Chiropractic care of back, neck, extremities, and other joint damage has become more accepted as a result of recent research and changing attitudes.
- In chiropractic, as in other types of independent practice, earnings are relatively low in the beginning, but increase as the practice grows.

Nature of the Work

Chiropractors, also known as doctors of chiropractic or chiropractic physicians, diagnose and treat patients whose health problems are associated with the body's muscular, nervous, and skeletal systems, especially the spine. Chiropractors believe interference with these systems impairs normal functions and lowers resistance to disease. They also hold that spinal or vertebral dysfunction alters many important body functions by affecting the nervous system, and that skeletal imbalance through joint or articular dysfunction, especially in the spine, can cause pain.

The chiropractic approach to health care is holistic, stressing the patient's overall health and wellness. It recognizes that many factors affect health, including exercise, diet, rest, environment, and heredity. Chiropractors use natural, drugless, nonsurgical health treatments, and rely on the body's inherent recuperative abilities. They also recommend lifestyle changes—in eating, exercise, and sleeping habits, for example—to their patients. When appropriate, chiropractors consult with and refer patients to other health practitioners.

Like other health practitioners, chiropractors follow a standard routine to secure the information needed for diagnosis and treatment. They take the patient's medical history, conduct physical, neurological, and orthopedic examinations, and may order laboratory tests. X rays and other diagnostic images are important tools because of the emphasis on the spine and its proper function. Chiropractors also employ a postural and spinal analysis common to chiropractic diagnosis.

In cases in which difficulties can be traced to involvement of musculoskeletal structures, chiropractors manually adjust the spinal column. Many chiropractors use water, light, massage, ultra-

sound, electric, and heat therapy. They may also apply supports such as straps, tapes, and braces. Chiropractors counsel patients about wellness concepts such as nutrition, exercise, lifestyle changes, and stress management, but do not prescribe drugs or perform surgery.

Some chiropractors specialize in sports injuries, neurology, orthopedics, nutrition, internal disorders, or diagnostic imaging.

Many chiropractors are solo or group practitioners who also have the administrative responsibilities of running a practice. In larger offices, chiropractors delegate these tasks to office managers and chiropractic assistants. Chiropractors in private practice are responsible for developing a patient base, hiring employees, and keeping records.

Working Conditions

Chiropractors work in clean, comfortable offices. The average work-week is about 40 hours, although longer hours are not uncommon. Solo practitioners set their own hours, but may work evenings or weekends to accommodate patients.



Most chiropractors are solo practitioners, treating patients and running the practice.